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PATENT ABSTRACTS OF JAPAN

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number : 05-165128(71) MITSUBISHI KASEI HOECHST KK
Applicant :

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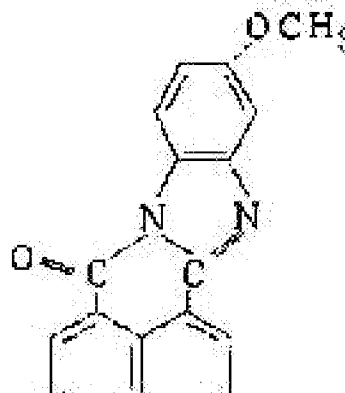
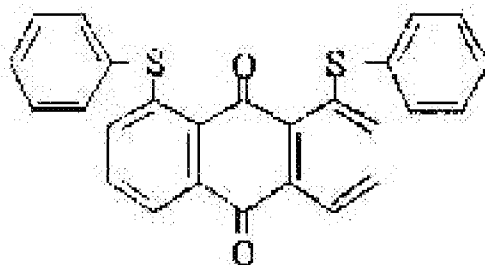
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(54) DISPERSE DYE MIXTURE

(57)Abstract:

PURPOSE: To obtain a disperse dye mixture which can dye polyester fibers yellow with excellent light fastness, temperature dependence and sublimation fastness.

CONSTITUTION: A yellow disperse dye composition is obtained by mixing 50-85wt.% dye of formula I with 15-50wt.% dye of formula II.





JAPANESE

[JP,06-345989,A]

CLAIMS DETAILED DESCRIPTION TECHNICAL
FIELD PRIOR ART EFFECT OF THE INVENTION
TECHNICAL PROBLEM MEANS EXAMPLE
DESCRIPTION OF DRAWINGS DRAWINGS

[Translation done.]

* NOTICES *

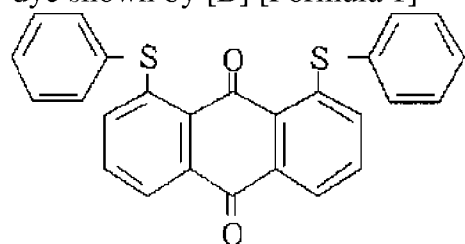
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CLAIMS

[Claim(s)]

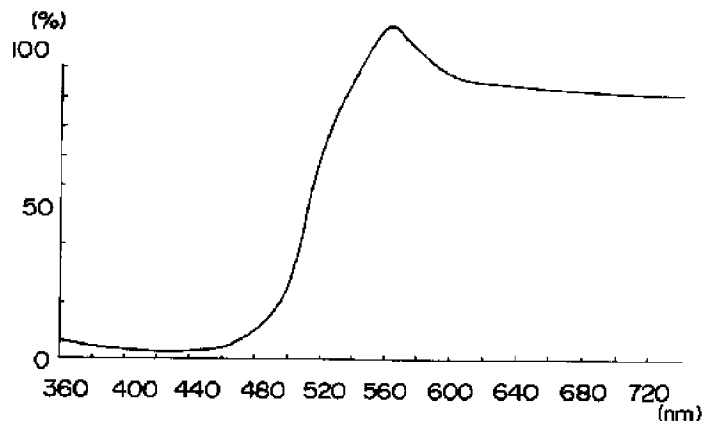
[Claim 1]The following structural formula 50 to 85 % of the weight of yellow disperse dye and the following structural formula which are shown by [A] A disperse dye mixture which mixes 15 to 50 % of the weight of yellow disperse dye shown by [B] [Formula 1]



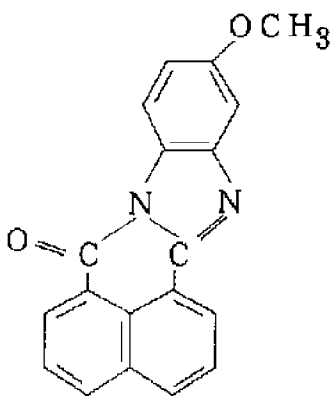
. (A)

[Formula 2]

Drawing selection Drawing 1



[Translation done.]



..... (B)

[Translation done.]

JAPANESE

[JP,06-345989,A]

CLAIMS DETAILED DESCRIPTION TECHNICAL FIELD PRIOR ART
EFFECT OF THE INVENTION TECHNICAL PROBLEM MEANS
EXAMPLE DESCRIPTION OF DRAWINGS DRAWINGS

[Translation done.]

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application]Especially this invention is excellent in color fastness to light, temperature dependence, and sublimation fastness, and relates to the disperse dye which can dye polyester fiber good yellow.

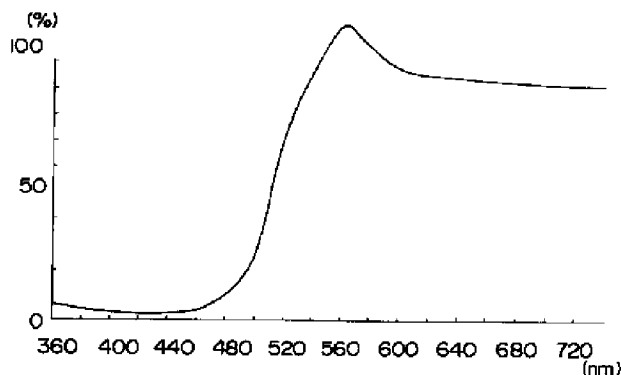
[0002]

[Description of the Prior Art]Although many cloth which consists of polyester fiber as construction material of the sheet for cars was used, what also has a colorful color of a sheet came to be required with fashion-izing of an automobile interior in recent years. However, in the case of the sheet for cars, it is difficult for the colour fade-out of a sheet to happen easily, since it is put to the bottom daylight of an elevated temperature in the sealing interior of a room in many cases, and to maintain a color beautiful for a long time. Therefore, it is desirable to use the thing excellent in color fastness to light, sublimation fastness, and temperature dependence as a color for dyeing polyester fiber for automobile seats.

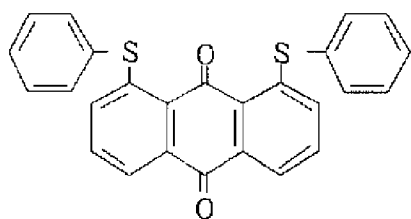
[0003]However, conventionally, there are few colors excellent in all color fastness to light, the sublimation fastness, and temperature dependence, and what can be satisfied as yellow disperse dye for automobile seats is not found. For example, the following structural formula Temperature dependence is insufficient, although the color shown by [A] is publicly known by the British JP,1105568,B specification, and this color is excellent in the field of color fastness to light and it can apply to dyeing of polyester fiber for automobile seats once.

[0004]

[Formula 3]

Drawing selection **Drawing 1**

[Translation done.]

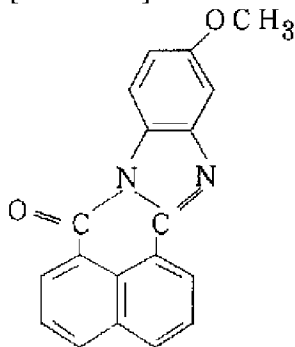


..... (A)

[0005]The following structural formula The disperse dye (CI Disperse Yellow 71) shown by [B] also had [light-fast fastness] the insufficient sublimation fastness of the outstanding thing.

[0006]

[Formula 4]



..... (B)

[0007]Said structural formula The color shown by [B] has fluorescence and has the fault that computer color matching (C. it is written as C.M) is not made. That is, transmissivity is measured in C.C.M, color matching is performed, and since transmissivity will exceed 100% if it has fluorescence, color matching by C.C.M is not made as a result.

[0008]

[Problem(s) to be Solved by the Invention]This invention persons are excellent also in temperature dependence with color fastness to light and sublimation fastness in view of the above-mentioned actual condition, C.C. It found out variously that the specific dye mixture of this invention attained the above-mentioned purpose as a result of examination for the purpose of providing a yellow system disperse dye suitable for dyeing the polyester fiber for automobile seats which can do M.

[0009]

[Means for Solving the Problem]This invention persons take an example by the above-mentioned actual condition, and are forecited types. It is a forecited type as a result of examining many things about how to raise temperature dependence and dyeing affinity, maintaining color fastness to light which was excellent in yellow disperse dye shown by [A]. A color and a forecited type of [A] When a yellow system color of [B] was mixed and used, maintaining sublimation fastness in the good state compared with a case of single use, it found out that temperature dependence improved and this invention was completed.

[0010]That is, a gist of this invention is 85 to 50% of the weight of a forecited type. It is 15 to 50% of the weight of a forecited type to anthraquinone dye shown by [A]. It consists in a disperse dye mixture which blends a naphthalene system color shown by [B]. Hereafter, this invention is explained in detail. In this invention, it is a forecited type. [A]** [B]Although yellow disperse dye shown is mixed and used, the mixing ratio is a structural formula. A color versus a structural formula of [A] It is 80 to 60 % of the weight : 20 to 40 % of the weight preferably with a color of [B] 85 to 50 % of the weight : 15 to 50% of the weight.

[0011]FormulaWhen there are not much few loadings of a color of [B],

improved effects, such as the amount of dyeing and temperature dependence, are small. It is a formula conversely. When there are not much too many loadings of a color of [B], an improved effect of sublimation fastness is small. At this invention, it is a forecited type as a yellow system ingredient. [A]It reaches. Although two kinds of disperse dyes of [B] are used together, in order to dye it a color tone for which it wishes, it is also possible to use it for a blue component and a red ingredient, blending.

[0012]In this case, transmissivity does not exceed 100% and color matching by C.C.M is possible for a dye mixture of this invention. As textiles which can be dyed by a color of this invention, Usually, mixed elegance of natural fibers, such as polyester fiber which consists of a polycondensation thing of polyethylene terephthalate, terephthalic acid, and 1,4-bis-(hydroxymethyl) cyclohexane, etc. or cotton, silk, and wool, and the above-mentioned polyester fiber, and a mixed fabric article are mentioned.

[0013]It is a forecited type in order to dye polyester fiber using a color of this invention. [A]It reaches. Since it is insoluble thru/or refractory, a color shown by [B] in water with a conventional method. A dyeing bath or printing paste distributed in an aquosity medium as a dispersing agent using a condensate of naphthalene sulfonic acid and formaldehyde, higher alcohol sulfate ester, high-class alkylbenzene sulfonates, etc. can be prepared, and dip dyeing or textile printing can perform.

[0014]for example, a case of dip dyeing -- a high-temperature-dyeing method, a carrier dyeing method, and a thermostat -- sol -- if the usual dyeing approaches, such as a staining technique, are applied, dyeing which excelled [elegance / its / polyester fiber or / mixed] in fastness can be performed. If publicly known acid, such as formic acid, acetic acid, phosphoric acid, or ammonium sulfate, is added to a dyeing bath by a case in that case, a good result will be obtained further. As for pH of a dyeing bath, it is preferred to usually adjust in the range of 5.0-9.5. And dyeing temperature is about 120-140 **.

[0015]

[Example]Next, although an example explains this invention still more concretely, this invention is not limited at all by the following examples.

[0016]One to Examples 1 and 2 and comparative example 3 formula [A] FormulaIt is independent about the color shown by [B], respectively, or is a rate of table-1 statement, and is a formula. [A]FormulaThe color shown by [B] was mixed. To the dyeing bath which distributed 3 l. of water containing 1g of naphthalene sulfonic acidformaldehyde condensates, and 2 g of higher alcohol sulfate ester, and prepared the dye mixture 1g. After immersing 100 g of polyester fiber and dyeing for 60 minutes at 130 **, when soaping, rinsing, and desiccation were performed, the yellow colored cloth was obtained. The temperature stability at the time of dyeing of the color fastness to light of the obtained colored cloth, sublimation fastness, color fastness to water, and the above-mentioned color and pH stability were good.

[0017]

[Table 1]

表 - 1

No.	使用染料 (g)	温度依存性 (%)	昇華堅牢度 (級)	C. C. M
比較例 1	式A 1.0 g	30	4 - 5	可 (図2)
比較例 2	式B 1.0 g	80	2	可 (図1)
比較例 3	式A 0.2 g 式B 0.8 g	90	2	不可
実施例 1	式A 0.6 g 式B 0.4 g	90	3 - 4	可
実施例 2	式A 0.8 g 式B 0.2 g	80	4	可 (図3)

[Equation 1]

$$(1) \text{ 温度依存性 } (\%) = \frac{120 \text{ }^{\circ}\text{C} \times 60 \text{ 分間染色での染色染料濃度}}{130 \text{ }^{\circ}\text{C} \times 60 \text{ 分間染色での染色染料濃度}} \times 100$$

(2) Sublimation fastness; according to JIS L0879-1968, it carried out in high temperature dyeing using the dyeing cloth at the time of considering it as the dyeing concentration 1/1N.

(3) The polyester cloth was made to dye the color of each judgment good [C.C.M] or improper, the reflectance curve was measured, what shows not less than 100% of value presupposed that it is improper, and the thing without that right presupposed that it is good. Dyeing concentration 1/3N. The measuring device used Macbeth 2020+.

[0018]

[Effect of the Invention]According to this invention, it is a forecited type. It is a formula to the color shown in [A]. By blending the color shown by [B], it is a formula about temperature dependence, maintaining good color fastness to light and sublimation fastness. It can be made to be able to improve sharply compared with the case where it is used by the color independent of [A], and C.C.M can provide a possible color.

[Translation done.]